

**COMPUTER ENGINEERING**  
**EEE 3132**

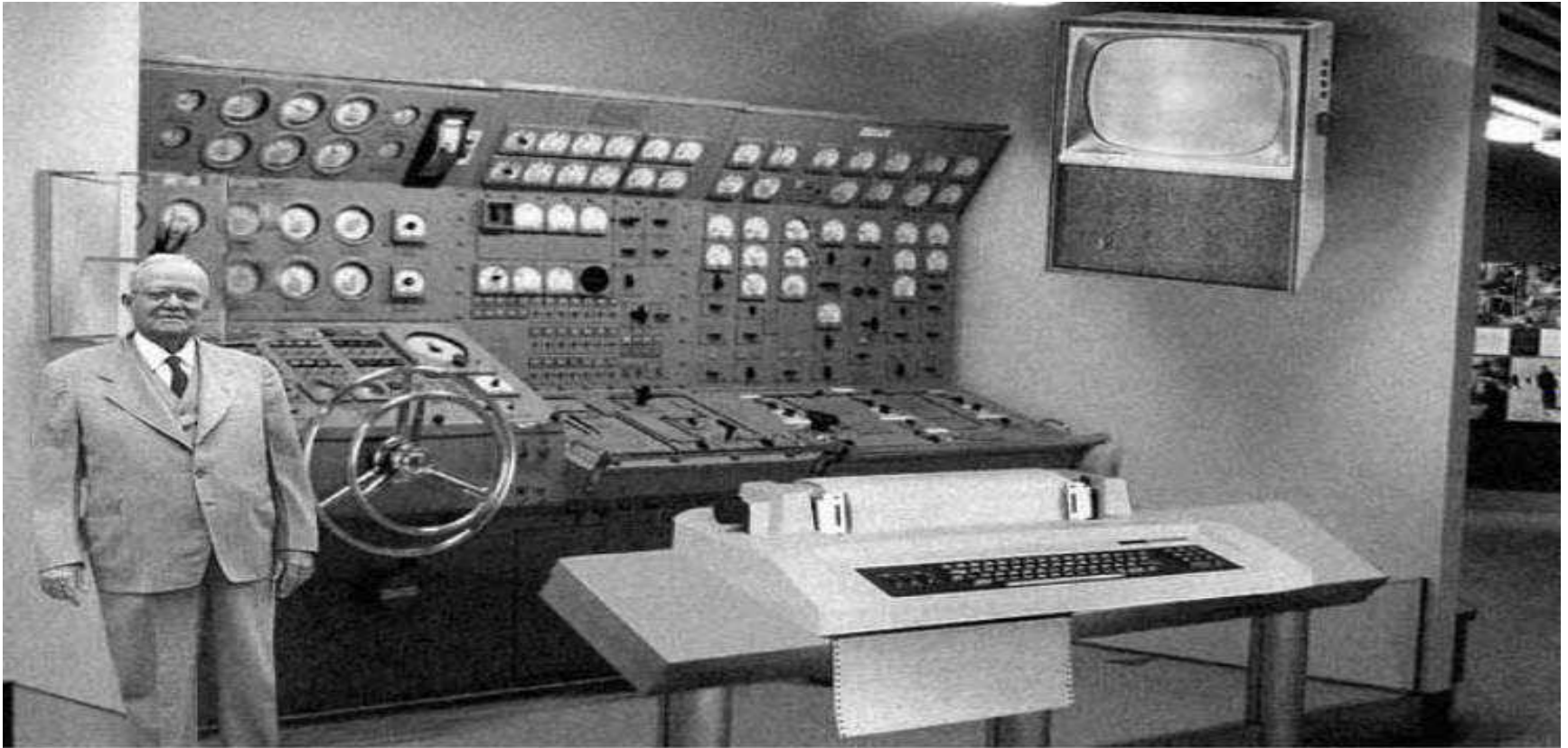
# INTRODUCTION

- **WHAT IS COMPUTER ENGINEERING?**
- **WHY STUDY COMPUTER ENGINEERING?**
- **WHERE CAN ONE APPLY COMPUTER ENGINEERING?**
- **WHAT ARE YOUR EXPECTATIONS FROM THIS COURSE?**

# INTRODUCTION - contd

- **WHERE CAN A COMPUTER ENGINEER WORK?**
- **HOW MANY DISCIPLINES OF COMPUTER ENGINEERING ARE THEY?**
- **COMPUTER ENGINEERING vs COMPUTER SCIENCES**
- **DEFINE A COMPUTER IN YOUR OWN WORDS?**

# INTRODUCTION - contd



*Scientists from the RAND Corporation have created this model to illustrate how a "home computer" could look like in the year 2004. However the needed technology will not be economically feasible for the average home. Also the scientists readily admit that the computer will require not yet invented technology to actually work, but 50 years from now scientific progress is expected to solve these problems. With teletype interface and the Fortran language, the computer will be easy to use.*

# INTRODUCTION - contd

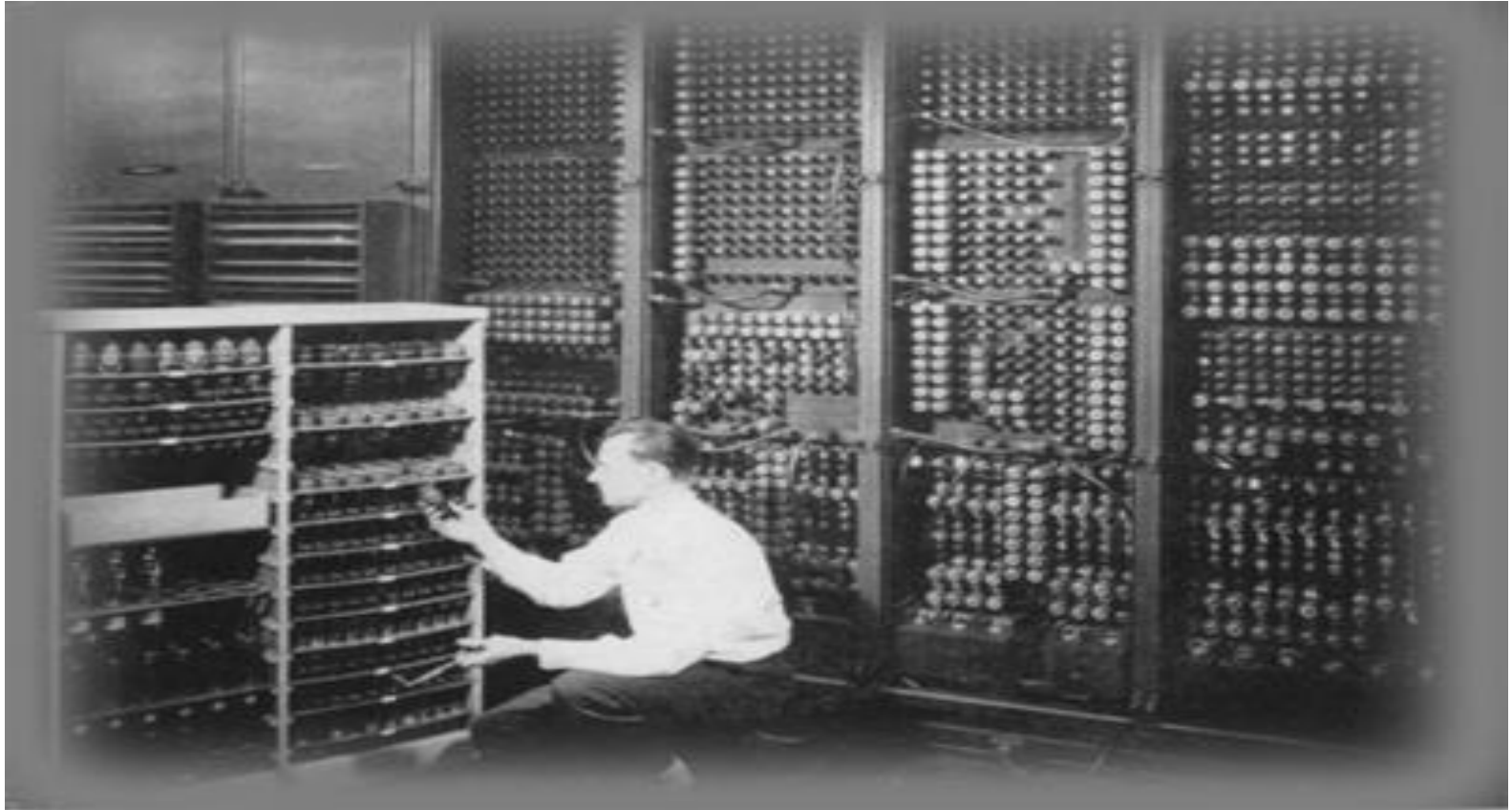


Figure 2: Old Computer

# INTRODUCTION - contd



Figure 3: Old Computer

# INTRODUCTION - contd



Figure 4: The 1980 Desktop Computer

# INTRODUCTION - contd



Figure 5: The 1990 Desktop Computer

# INTRODUCTION - contd

- **HOW MUCH DO WE KNOW ABOUT COMPUTERS?**
  - **Hardware vs Firmware**
  - **Hardware vs Software**
  - **Firmware vs Software**
  - **Operating System; e.g.**
  - **Software Applications; e.g.**
  - **Byte vs Bit**

# INTRODUCTION - contd



Figure 6: The 21st Desktop Computer

# INTRODUCTION - contd



Figure 7: A modern Laptop

# INTRODUCTION - contd



Figure 8: A Female using an Ipad

# INTRODUCTION - contd



Figure 9: A NG of Computing Devices – Smart Phones

# INTRODUCTION - contd



Figure 10: A NG of Computing Devices – Smart Phones

# INTRODUCTION - contd

- **WHERE DOES EEE 4131 FIT IN ALL THIS FRENZY OF GADGETS AND DEVICES?**
- **STAY TUNED...**

# INTRODUCTION - contd

- **COURSE CONTENT**
  - **Part 1: Hardware (Microprocessors & Microcontrollers + Assembly Programming (Lecturer – Me)**
  - **Part 2: Software, C++ Programming (Lecturer – Mr. A.D. Ngoyi)**

# INTRODUCTION - contd

- **A WORD ON MOODLE**
  - **LMS/CMS (E-Learning) Platform**
  - **Delivery of Lecture Notes, Assignments, Quizzes, Forums, Discussions on EEE 4231**
  - **Will ensure each one of you get a UNZA email address (required for registration on Moodle).**

# INTRODUCTION - contd

- **ASSESSMENT**

- **9 – 10 Assignments** **5%**
- **6 or 7 Labs** **15%**
- **Test (end of Term 1)** **20%**
- **Final Exam ( Mid Term 2)** **60%**

# ***Protocols***

1. When you want to ask a question, **you should raise your hand**. If you are allowed to speak, **you should FIRST introduce yourself** and then speak.
2. At all times during EEE 4131 sessions, maintain **DECENCY!!!**
3. **No smoking, no drinking, no eating** in the lecture hall during lecture session
4. **No foul language, no violence**
5. **Respect and courtesy - some golden rules**

## ***Lecturing Staff***

1. Mr J. SHABANI – Lecturer/Coordinator

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2. Mr A.D. Ngoyi – Lecturer

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3. Mr S. Nkonde –Tutor

4. Mr T.J. Phiri –Tutor

## ***LAB & TUTORIAL SESSIONS***

1. LAB – Two students per group
2. Tutorials if need be – the whole class.